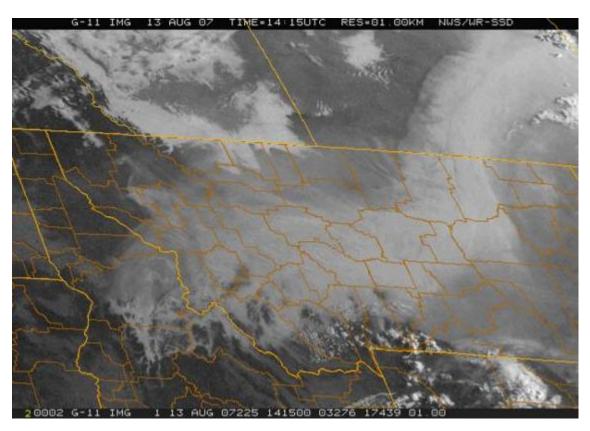
# Montana DEQ Forest Fire Smoke Advisory August 13 2007 10:00 AM Monday

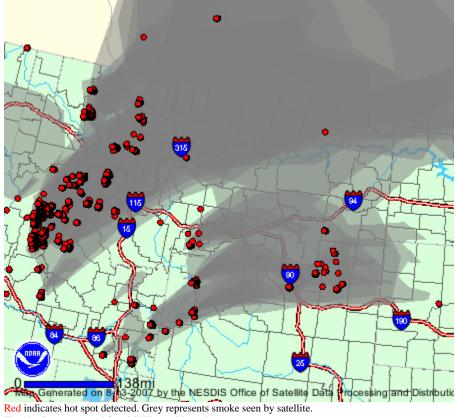
### **Current Situation**

Very smoky conditions persist across broad areas of the state this morning. This morning's satellite photo shows that the main plume aloft has moved off towards Saskatchewan but plenty of residual smoke is left to blanket the state. The smoke came off yesterday afternoon and evening in towering plumes of smoke that combined into a very dramatic mass of smoke seen in the satellite photo from last night farther below. Smoke has been trapped in several western Montana Valleys and UHNEALTHY levels of smoke are left in Missoula, Hamilton, Butte, Dillon, Bozeman, Livingston, and Helena. Smoke has lifted overhead temporarily in Whitefish and Kalispell and they are at UNHEALTHY FOR SENSITIVE at the moment. East of the mountains, UNHEALTHY FOR SENSITIVE levels are impacting Great Falls, Choteau, and Augusta. MODERATE smoke levels are listed in the Polson, Ronan, Lewistown, Billings, and Baker. Many other areas of the state with no reporting mechanism are also being impacted today. Residents near active fires or experiencing noticeable smoke levels should use the VISIBILITY GUIDELINES to determine smoke levels in their area and guide their activity decisions. Smoke aloft will mix down in many areas later this morning and direct smoke impacts from active fires will also be a problem again this afternoon. See the forecast at the bottom for details.

Morning satellite photo centered on Great Falls:



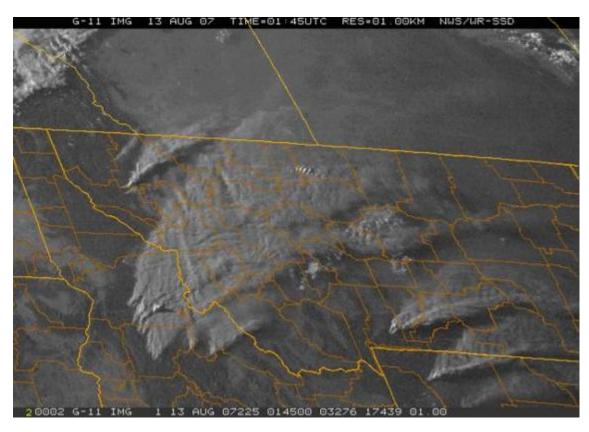
This morning's analysis from NOAA's satellite services division shows the active fires in Montana and the smoke plumes combining and spreading downwind(the analyzed smoke is based on yesterday's satellite coverage, the fire detects are based on last nights satellite coverage)



Fire size is exaggerated for visibility at this scale.

To identify individual fires on graphic above go here: http://activefiremaps.fs.fed.us/lg\_fire2.php

This satellite photo from 7:45 PM last night shows the huge plumes coming off of the fires in Idaho and Montana. Plumes from the Brush Creek Fire west of Whitefish, the Chippy Creek fire west of Polson and the Wicked Creek fires south of Livingston are visible but plumes from the other fires in the state are lost in the combined plumes starting in Idaho.



This MODIS satellite photo taken yesterday, August 12 about 2:45 PM, before the Idaho

plumes reached the state shows the plumes coming up from the Montana fires.



Real time particulate information is currently available in most of the larger urban areas from several different sources including: DEQ run PM-10 BAMS and PM2.5 BAMS, CS&KT run PM-10 TEOMS, NWS ASOS visibility monitors, and USFS remote access Nephelometers and BAMS.

This morning's smoke report is below, comparing particulate levels where we have information to MDEQ's Forest Fire health advisory levels.

## Updated 10 AM August 13, 2007

Locations and severity of forest fire smoke reports since midnight of the date above at reporting stations.

<u>HAZARDOUS</u>	
VERY UNHEALTHY	
UNHEALTHY	Missoula T8
	Hamilton 24
	Butte T8
	Dillon Vis(8)
	Helena T8
	Bozeman T24
	Livingston T24
UNHEALTHY	Kalispell T24
FOR SENSITIVE GROUPS	Whitefish T24
	Choteau T24
	Augusta T24
	Great Falls Vis(8)

<u>MODERATE</u>	Polson T24
	Ronan T24
	Billings Vis(2)
	Lewistown Vis(2)
	Baker Vis(2)

T1(x) One-hour TEOM or BAM value (number of values)
T8(x) Eight-hour average TEOM or BAM value(number of values)

T24 24 hour average TEOM or BAM value Vis(x) Visibility value(number of hours)

Vis(am/pm) Visibility value from twice/day reporting stations

(est) estimate

Local impacts in areas immediately adjacent to active fires are expected to exceed some or all of the advisory levels. DEQ recommends the use of local <u>visibility guidelines</u> to evaluate possible health risks and make informed activity decisions.

#### **Forecast**

The winds that produced the Red Flag conditions yesterday have diminished and conditions for the next several days will be hot and stagnant with only a few hours of good dispersion in the afternoons. This will help reduce the fire activity levels but the smoke impacts will continue to be a problem for at least the next few days. Transport winds will be from the southwest today switching around to the west by tomorrow. This will continue to move smoke into Montana communities. Smoke levels will be intermittently very bad with some clearing as the plumes move around. Residents downwind of the active fires and experiencing impacts from residual smoke will need to pay close attention to conditions in their area and use the visibility guidelines to guide their activity decisions as the situation changes.

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